REMARKS/ARGUMENTS

Applicant has carefully reviewed and considered the Office Action mailed on May 23, 2006, and the references cited therewith.

No claims are amended, canceled, or added; as a result, claims 1-8 and 10-29 are now pending in this application.

§103 Rejection of the Claims

Claims 1-8 and 10-29 were rejected under 35 USC § 103(a) as being unpatentable over Notargiacomo et al (U.S. Patent No. 6,879,422) in view of Hui et al (U.S. Patent No. 6,438,148). Applicant traverses the rejection as follows.

In the current Office Action, the Examiner agrees that the Notargiacomo reference does not disclose an electroabsorption modulator. (Office Action, Page 11). However, the Examiner maintains the assertion that "Hui et al '148 teaches of using an electroabsorption modulator in a feedback system to encode information onto an optical beam . . . for the purpose of providing a modulator to match the required speed of the operation."

The Examiner contends that Hui teaches:

> using an electroabsorption modulator in a feedback system to encode information onto an optical beam (Column 4, line 22-Column 5, line 35 and Column 8, lines 43-51, wherein the electroabsorption modulator "34" encodes information onto the optical beam and feedback system "44" controls the electrical input "56" into the modulator, Figure 1), for the purpose of providing a modulator to match the required speed of the operation (Column 8, lines 43-51).

From Applicant's review of the Hui reference, the reference appears to describe a method for encoding data into a high speed optical train by providing phase shifts between "N" short pulse optical trains of frequency "f" to form a combined optical pulse train having a frequency of "Nf." (Column 1, lines 57-67).

Further, as illustrated in Figure 1, the feedback 56 is fed back into the system at the lasers 20 and 30 by bias trees 50 and 52. This operation is described in detail at col. 5, lines 21-27, wherein the reference states:

> The feedback means 44 is used to provide an active control of the relative phase shift between the branches 16 and 18. It includes narrow bandwidth photodiode and electrical k amplifier (none of them is shown), the amplifier being centralized at frequency 2f. The feedback means 44 extracts the information about the current phase alignment between the two branches and generates a feedback signal 56 sent to the variable delay line 42, which is a voltage controlled microwave delay line, to adjust the phase shift between the lasers 20 and 30 and to ensure that the trains 12 and 14 interleave in precise timing.

Accordingly, this reference specifically directs its adjustment to the phase shift of the one or more lasers. As illustrated above, this is not what Applicant has claimed, nor does it suggest the claimed structure since the reference is not biasing the correct component of the system. There is no suggestion of applying the feedback 56 to the modulators 25 and 35.

Further, there can be no suggestion because the reference has a completely different goal in mind, namely, the adjustment of the phase shift between two laser sources to ensure that the trains interleave in precise timing. As stated above, this is not the focus or the mechanism claimed by Applicant or the focus of the Notargiacomo reference.

From Applicant's review of the Notargiacomo and Hui references, neither reference, either independently or in combination, teaches or suggests the concept of **adjusting the electrical input signal of an electroabsorption modulator** based on a measured harmonic value. In contrast, Applicant's independent claim 1 recites, among other things:

> adjusting the electrical input signal provided to the EAM based upon the measured harmonic value

Claim 7 recites, among other things:

adjusting an electrical input to the EAM

Claim 13 recites, among other things:

> upon detection of the harmonic value, adjusting the electrical input signal provided to the EAM based upon the measured harmonic value

Claim 18 recites, among other things:

> to calculate an adjustment in the electrical input signal, to be applied to the EAM

Based on the foregoing, Applicant respectfully submits that the cited references do not support a proper prima facie case of obviousness. Applicant respectfully requests reconsideration and withdrawal of the § 103 rejection to independent claims 1, 7, 13, and 18, as well as those claims which depend therefrom.

CONCLUSION

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney at (612) 236-0121 to facilitate prosecution of this matter.

CERTIFICATE UNDER 37 CFR §1.8: The undersigned hereby certifies that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail, in an envelope addressed to: **MS AMENDMENT** Commissioner of Patents, P.O. BOX 1450, Alexandria, VA 22313-1450 on this 23rd day of August, 2006.

Alison L. Sabandra
Name

Signature

Respectfully Submitted,
John A. Krawczak

By his Representatives,
BROOKS & CAMERON, PLLC
1221 Nicollet Avenue, Suite 500
Minneapolis, MN 55403

By: _____
Jeffery L. Cameron
Reg. No. 43,527

Date: 8/23/06